

Title (en)  
Enzymatic reagent ink

Title (de)  
Enzymatische Reagenztinte

Title (fr)  
Encre réactive enzymatique

Publication  
**EP 2243840 A1 20101027 (EN)**

Application  
**EP 10250818 A 20100423**

Priority  
US 42939309 A 20090424

Abstract (en)  
An enzymatic reagent ink includes an amount of hydrophobic silica material (e.g., a fumed silica material), an amount of surfactant (such as a non-ionic surfactant); and an amount of enzyme (for example, glucose oxidase). The amounts of the hydrophobic silica material and the surfactant present in the enzymatic reagent ink is predetermined based on first and second relationships. The first relationship is a relationship between wettability of a representative hydrophobic silica material and a first calibration characteristic of an analytical test strip that includes an enzymatic reagent ink containing the representative hydrophobic silica material. In addition, such a first relationship defines a minimum wettability that provides an acceptable first calibration characteristic. The second relationship is a relationship defining wettability of a mixture of the hydrophobic silica material and a surfactant across a range of relative amounts of the hydrophobic silica material and the surfactant. The amounts of the hydrophobic silica material and the surfactant in the enzymatic reagent ink are predetermined to provide at least the minimum wettability defined by the first relationship during manufacturing of the enzymatic reagent ink, and therefore, an acceptable first calibration characteristic.

IPC 8 full level  
**C09D 11/00** (2006.01); **C12Q 1/00** (2006.01)

CPC (source: EP US)  
**C12Q 1/001** (2013.01 - EP US); **C12Q 1/006** (2013.01 - EP US)

Citation (applicant)  

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Designated contracting state (EPC)  
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